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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

WO 99/59142 (51) International Patent Classification 6: (11) International Publication Number: **A2** G11B (43) International Publication Date: 18 November 1999 (18.11.99) (81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, PCT/IB99/01266 (21) International Application Number: BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, 13 May 1999 (13.05.99) (22) International Filing Date: KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, (30) Priority Data: ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, US 13 May 1998 (13.05.98) 60/085,334 UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI (71) Applicant (for all designated States except US): OMD DEpatent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, VICES LLC [US/US]; 1013 Centre Road, Wilmington, DE NE, SN, TD, TG). 19805 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): ALPEROVICH, Mark [IL/IL]; Hamelech Hizkija 33/3, 77497 Ashdod (IL). Published Without international search report and to be republished upon receipt of that report. LEVICH, Eugene [IL/US]; Apartment 9L, 330 West 45 Street, New York, NY 10036 (US). ZUHL, Irene [IL/IL]; Yoav Ben Tzruya Street 10/3, 77535 Ashdid (IL). MAKIEVSKAYA, Svetlana [IL/IL]; Mamapilim Street 20, 77497 Ashdod (IL). (74) Agents: COHEN, Herbert et al.; Blank Rome Comisky & McCauley LLP, Suite 1000, 900 17th Street, N.W., Washington, DC 20006 (US).

(54) Title: ORGANIC DYE-IN-POLYMER (DIP) MEDIUM FOR WRITE-ONCE-READ-MANY (WORM) OPTICAL DISCS WITH FLUORESCENT READING

(57) Abstract

High sensitive organic dye-in-polymer (DIP) medium for write-once-read-many (WORM) optical discs with fluorescent reading. The medium consists of a fluorescent color means, capable of absorbing writing radiation produced by a laser, a compound capable of generating free radicals upon influence of heat produced by the writing radiation and a polymer capable of producing a translucent film enabling high quantum yield of the fluorescence induced in the color means. The color means can be selected from xanthene dyes of the eosine and rhodamine groups, acridine, oxazine, azine, peylene, violanthrone, cyanine, phtalocyanine, indigoide colors and porphyries. The free radicals generating compound can be chosen from the group of compounds comprising azo and diazoi compounds or peroxyde compounds. The film producing polymer can be selected from the group of compounds comprising cellulose ethers, vinyl resins or acrylic resins.

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